

SHAPIRO, F.B.; SHAPIRO, N.I., prof., red.; ANDREYEV, V.S., red.

[General genetics] Obshchaya genetika. Moskva, Nauka,
1965. 298 p. (MIRA 18:7)

1. Akademiya nauk SSSR. Nauchnyy sovet po problemam molekulyarnoy biologii.

TORUBAROV, V.A.; ANDREYEV, V.S.; TARASOVA, K.S.

Introduction of the high-frequency "Titr-1" titrimeter. Biul. tekhn.
ekon.inform. Gos. nauch.-issl. inst. nauch. i tekhn. inform. 18 no.6:
13-14 Je '65. (MIRA 18:7)

SIDOROV, B.N.; SOKOLOV, N.N.; ANDREYEV, V.S.

Mutagenic effect of ethylenimine in a series of cell generations.
(MIRA 18:10)
Genetika no.1:112-122 '65.

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

ANDREYEV, V.S.; ANISIMOV, I.V.; S-PH-74, Yu.N.

Statistical methods for the determination of the frequency
characteristics of rectification columns. Khim. prom. 41 no.1:
49-54 Ja '66. (MIRA 18:3)

KOSHKIN, V.G., kand. tekhn.nauk; MAKOTINSKIY, M.P., kand. arkh.; MUNTS,
V.O., kand. arkh.; RUDINA, M.A., arkh.; SILUANOVA, G.V., arkh.;
SHORYGINA, N.V., kand. khim. nauk; Priminali uchastiye:
BOGUSLAVSKIY, A.I., inzh.; ZARUBITSKIY, A.Ye., inzh.; LIVSHITS,
A.M., inzh.; MASHINA, N.N., inzh.; OTLIVANCHIK, A.N., kand.
tekhn. nauk; ROMANOVA, L.A., inzh.; CHERKINSKIY, Yu.S., inzh.;
ANDREYEV, V.S., retsenzent; IOFAN, B.M., retsenzent; KRIPPA,
A.I., arkh., retsenzent; GURVICH, E.A., red.izd-va; BRUSINA,
L.N., tekhn. red.

[Catalog of finishing materials and products] Katalog otdeloch-
nykh materialov i izdelii. Moskva, Gosstroizdat. Pt.1.[Plastics;
polymer finishing materials] Plastmassy; polimernye otdelochnye
materialy. 1962. 119 p. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroi-
tel'nykh materialov. 2. Chleny-korrespondenty Akademii stroitel'-
stva i arkhitektury SSSR (for Andreyev, Iofan, Krippa).
(Plastics) (Building--Details)

ANDREYEV, V.T., inzhener.

Efficiency promotion in the Leningrad Gunboat Shipyard. Izobr. v
SSSR 1 no.6:24-26 D '56. (MLRA 10:4)
(Leningrad--Shipbuilding)

ANDREYEV, Venyamin Vasil'yevich

[Agriculture of the German Democratic Republic] Sel'skoe
khoziaistvo GDR. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959.
155 p. (MIRA 13:5)
(Germany, East--Agriculture)

ANDREYEV, V.V.

~~Classification~~

Causes for the breakage of plastic dental prostheses. Stomatologia no.3:
48-52 '53. (MLBA 6:7)

(Teeth, Artificial)

ANDREYEV, V.V.

Spontaneous deformations of polymethylacrylic prostheses; and
methods of prevention. Stomatologiya, no.6:57 N-D '55. (MLRA 9:5)

1. Iz proteznogo otdela (zaveduyushchiy kandidat meditsinskikh
nauk B.Ye. Lemberk) Odesskogo nauchno-issledovatel'skogo
stomatologicheskogo instituta (direktor, kandidat meditsinskikh
nauk M.I. Kukhareva, zamestitel' direktora po nauchnoy chasti,
doktor biologicheskikh nauk S.A. Nikitin).
(DENTAL PROSTHESIS)

ANDREYEV, V.V.

LAZAREV, N.V.; ALEKSANDROV, I.S.; LYUBLINA, Ye.I.; AKKERBERG, I.I.; ZAKA-
BUNINA, M.S.; GADASKINA, I.D.; DOBRYAKOVA, N.S.; KREPS, I.F.; KARASIK,
V.M.; LEVINA, E.N.; DANISHEVSKIY, S.L.; YEGOROV, N.M.; RYLOVA, M.L.,
starshiy nauchnyy sotrudnik; KAPOV, B.D.; ANDREYEV, V.V.; LYKHINA,
Ye.T.; ZAMESHAYEVA, G.I.; ANISIMOV, A.N.; FRIDLYAND, I.G.; DANETSKAYA,
O.L.; BOGOVSKIY, P.A.; TIUNOV, L.A.; MIKHEL'SON, M.Ya.; ABRAMOVA, Zh.I.,
GRIGOR'YEVA, L.M.; KLINSKAYA, K.S.

Third Leningrad conference on the problems of industrial toxicology.

Farm.i toks. 16 no.2:59-62 Mr-Apr '53.

(MLRA 6:6)

(Poisons)

ANDREYEV, V.V., kandidat tekhnicheskikh nauk.

Application of vibrational methods in preparing retted flax.

Tekst.prom. 16 no.9:16-17 S '56.

(MLRA 9:12)

(Retting) (Flax)

ANDREYEV, V.V.; SEREGIN, A.S.; MAKEYEVA, V.S., red.; GORDNYCHIK, G.M., red.;
KOGAN, V.V., tekhn.red.

[KP-100-L flax processing machine] Kudleprigotovitel'naya mashina
KP-100-L. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi
promyshl., 1958. 77 p. (MIRA 11:4)
(Flax) (Textile machinery)

ANDREYEV, Vladimir Vladimirovich; SKREGIN, Aleksandr Sergeyevich;
MAKEYEV, V.S., red.; GORDEYCHIK, G.M., red.; MEDVEDEV,
L.Ya., tekhn.red.

[The MT-100-L scutching and hackling machine] Misl'no-
trepal'nyi agregat MT-100-L. Moskva, Gos.nauchno-tekhn.
izd-vo lit-ry po legkoi promyshl., 1958. 68 p. (MIRA 12:6)
(Flax processing machinery)

~~ANDREYEV, Vitaliy Vasil'yevich; KARTASHEV, Rostislav Dimitriyevich; IGOSHIN,~~
M.G., redaktor; KARYAKINA, M.S., tekhnicheskiiy redaktor

[Small boat; construction, handling, use] Shliupka; ustroistvo,
obrashchenie, ispol'zovanie. Moskva, Izd-vo DOSAAF, 1957. 152 p.
(Boats and boating) (MIRA 10:11)

MARKOV, Valentin Vasil'yevich; SUSLOV, Nikolay Nikolayevich; TRIFONOV, Vadim Georgiyevich; ANDREYEV, V.V., retsenzent; ARIFKHANOV, U.Kh., retsenzent; ARNO, A.A., retsenzent; DERBENEV, S.I., retsenzent; SHUSHKIN, A.A., retsenzent; MAKEYEV, V.S., nauchnyy red.; DUKHOVNYI, F.N., red.; SHAPENKOVA, T.A., tekhn. red.

[Primary processing of bast fibers] Pervichnaia obrabotka ~~1st~~ biannykh volokon. Moskva, Gos. izd-vo "Rostekhzdat," 1961.
463 p. (MIRA 15:4)

(Textile fibers)

(Textile machinery)

ANDREYEV, VITALIY VASIL'YEVICH

PHASE I BOOK EXPLOITATION 495

Andreyev, Vitaliy Vasil'yevich

Vodolaz --pochetnaya spetsial'nost' (Diver --An Honored Profession)
Moscow, Izd-vo DOSAAF, 1957. 47 p. 6,500 copies printed.

Ed.: Igoshin, M.G.; Tech. Ed.: Andrianov, B.I.

PURPOSE: The aim of this booklet is to interest young people in the diving profession by describing the challenge presented by this occupation.

COVERAGE: This is a brief, popularized description of the diving profession in the Soviet Union with emphasis placed on equipment and operations. A short history of diving from ancient to modern times is followed by a recital of Russian achievements in the field. The effect of underwater conditions on the human body is discussed and a comparatively detailed description of various types of diving suits and apparatus (illustrated) is given. There is also an account of several episodes from salvage operations. The salvaging in 1945

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Diver -- An Honored Profession

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of the tanker "V. Couturier" (140 m. long, 17 m. wide) from a depth of 43 m., and that of an English submarine torpedoed by the Soviets and downed in the Arctic Ocean are two examples. The author describes some peacetime activities of divers, including underwater mine detonation, pipeline and electric and telephone cable laying, underwater construction and debris clearance, and the maintenance in winter of the ice highway across Lake Ladoga which connects Leningrad with the rest of the country. The following scientists and engineers have contributed to advancements in this field: K.K. Khrenov (underwater electric welding and metal cutting), Ye. P. Tveritinov, Lt. Kolkas'yev, Shidlovskiy, A.A. Krylov, Academician Yu.A. Shimanskiy, D.P. Skobov, Dr. of Tech. Sc., and K.F. Kosourov. The author concludes that the developments in automation and telemechanics point to the creation of a "mechanical diver" in the near future. There are no references.

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Features of a diver's underwater stay and his equipment	14
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AVAILABLE: Library of Congress (VM983.A5)

MM/ksv
7-31-58

3/3

KOZLOVA, M.V.; ANDREYEV, V.V.

Disinfection of purified waste waters by ultraviolet rays. Vod.
i san. tekhn. no.11:1-4 N '60. (MIRA 13:11)

(Water--Purification)

(Ultraviolet rays--Industrial applications)

ANDREYEV, V.V.

AUTHORS: Andreyev, V.V. and Nosulya, N.Ye., Engineers 98-58-3-5/22

TITLE: Application of Radioactive Cobalt for Controlling and Testing Welds of Reinforcement Rods (Primeneniye radioaktivnogo kobal'ta dlya kontrolya kachestva svarki armaturnykh stержney)

PERIODICAL: Gidrotekhnicheskoye Stroitel'stvo, 1958, Nr 3, pp 21-23 (USSR)

ABSTRACT: The application of gamma-defectoscopy for controlling welds requires a great deal of investigation and experiments. Investigations were carried out on the structures of the Stalin-grad and Kuybyshev hydroelectric power stations, with the aid of isotope Co-60, whereas the evaluation of the quality of the welds was done on the basis of gamma photographs obtained by X-raying. In all, 333 samples were tested, representing various kinds of welding such as vat slag welding, electric slag welding and butt end contact welding. After the gamma X-raying, the samples were mechanically tested to ascertain the relationship between mechanical characteristics and the nature, dimensions and location of the determined defect. For the protection of the operator, a special portable container (Figure 1) had been constructed in which the capsule with Co-60 was inclosed. The recharging of the container was

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98-58-3-5/22

Application of Radioactive Cobalt for Controlling and Testing Welds of Reinforcement Rods

done by means of a special handle, 1,400 m long (Figure 2). For fixing the container on the reinforcement rod, a special support was made (Figure 3). Focussing distance varied from 360-500 mm, depending upon the diameter of the rods, which were 50 mm and larger. X-raying was done with 2 reinforcing screens and lead foils. To increase sensitivity, it is recommended to use filters of diffused radiation to limit the surface of irradiation, and to apply flat and wedge type defectometers on top and below the weld to be examined. Gamma X-maying with Co-60 makes it possible to detect all interior defects such as blisters, flaws, non-fusion and cracks. Experience with gamma defectoscopy during the construction of the Stalingradskaya ges (Stalingrad Hydroelectric Power Station) has shown that with gamma defectoscopy it is not only possible to obtain better welds of reinforcement rods, but also to effect an appreciable cost reduction. There are 3 figures and 1 Soviet reference.

Card 2/2

1. Cobalt isotopes (Radioactive) - Applications
2. Welding - Test methods
3. Welding - Test results

GUSAROV, N.N., inzh. Prinsipali uchastnye: ANDREYEV, V.V., inzh.;
 RABOTNOV, B.A., inzh.; FEDOTOV, L.Ye., inzh., nauchnyy red.
 BALDIN, V.A., retsenzent; BRODSKIY, A.Ye., kand.tekhn.nauk,
 retsenzent; SAVALOV, I.G., kand.tekhn.nauk, retsenzent; LEVI,
 S.S., kand.tekhn.nauk, retsenzent; SOKOLOV, V.S., kand.tekhn.
 nauk, retsenzent; LEBEDEV, Yu.I., retsenzent; RAZUMOVA, E.D.,
 inzh., retsenzent; DOLGIKH, V.G., inzh., retsenzent; MAKSIMOV,
 K.G., red.izd-vs; PUL'KINA, Ye.A., tekhn.red.

[Provisional instructions on using gamma rays in controlling
 welded joints of reinforcements in reinforced-concrete con-
 struction elements] Vremennaya instruktsiya po kontroliu
 svarnykh soedinenii armatury zhelezobetonnykh konstruktsii
 prosvechivaniem gamma-luchami. Leningrad, Gos.izd-vo lit-ry po
 stroit., arkhitekt. i stroit.materialam, 1960. 46 p.

(MIRA 14:2)

1. Russia (1923- U.S.S.R.) Ministerstvo stroitel'stva elektro-
 stantsiy. Tekhnicheskoye upravleniye. 2. Tsentral'nyy nauchno-
 issledovatel'skiy institut stroitel'nykh konstruktsiy (for Baldin,
 Brodskiy). 3. Chlen-korrespondent Akademii stroitel'stva i arkhi-
 tektury SSSR (for Baldin). 4. VNIIMS (for Savalov, Levi). 5. Tsent-
 ral'naya nauchno-issledovatel'skaya laboratoriya Gosgortekhnadzora
 (for Sokolov). 6. Zamestitel' glavnogo sanitarnogo inspektora, Sani-
 tarnaya inspeksiya SSSR (for Lebedev). 7. TsNIP Ministerstva stroi-
 tel'stva elektrostantsiy (for Razumova). 8. Treest Se vzapenergo-
 montazh (for Dolgikh).

(Gamma rays--Industrial applications) (Reinforcing bars--Welding)

GUTOVSKIY, Mikhail Vasil'yevich; ANDREYEV, V.V., kand.tekhn. nauk, dots.,
retsenzent; DEKATOV, V.N., kand.tekhn.nauk, dots., retsenzent;
POPOV, Yu.A., prof., red.; GRIGORASH, K.I., red.izd-va; NOVIK, A.Ya.,
tekhn. red.

[Manual for the design of components and systems of aeronautical
electric equipment] Posobie po proektirovaniu i raschetu elementov i
sistem aviatsionnogo elektrooborudovaniia. Moskva, Gos.nauchno-tekhn.
izd-vo Oborongiz. No.1. [Electric circuits for airplanes] Samoletnye
elektroseti. Pod red. IU.A.Popova. 1961. 136 p. (MIRA 14:11)
(Airplanes--Electric equipment)

GUTOVSKIY, Mikhail Vasil'yevich; KORSHUNOV, Vladislav Fedorovich;
ANDREYEV, V.V., kand. tekhn. nauk, retsenzent; KAMENSKIY,
A.V., retsenzent; GRIGORASH, K.I., red.izd-va; ORESHKINA, V.I.,
tekhn. red.

[Manual on the calculation and design of aeronautical electrical
equipment components and systems] Posobie po proektirovaniu i
raschetu elementov i sistem aviatsionnogo elektrooborudovaniia.
Pod red. IU.A.Popova. Moskva, Oborongiz. No.2. [Power electro-
magnets and contactors] Silovye elektromagnity i kontaktory.
1962. 164 p. (MIRA 15:7)

(Airplanes—Electric equipment)

DMITRIYEVA, A.I.; SHUSHKIN, A.A.; MIRONOV, K.M.; DERBENEV, S.I.;
GRANICHNOVA, Z.P.; OKUN', M.M.; MIKHAYLOVA, N.N.; ANDREYEV,
V.V.; MAKEYEV, V.S.; OSIPOVA, V.M.; L'VOVYY, V.S.;
SMIRNOV, G.N., nauchnyy sotr.; ZAIKIN, I.N.; TAL'NISHNIKH,
G.N.; MORKOVIN, V.A.; GALAGAN, V.A.; RAZUVAYEV, A.A., red.;
SOKOLOVA, V.Ye., red.; TRISHINA, L.A., tekhn. red.

[Manual on the industrial primary processing of flax]
Spravochnik po zavodskoi pervichnoi obrabotke l'na. Izd.2.,
perer. i dop. Moskva, Rostekhzdat, 1962. 755 p.

(MIRA 15:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut lubyanykh volokon (for Dmitriyeva, Shushkin, Mironov, Derbenev, Granichnova, Okun', Mikhaylova, Andreyev, Makeyev, Osipova).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut okhrany truda (for Smirnov). 3. Upravleniye zagotovki i pervichnoy obrabotki l'na Kalininskogo sovnarkhoza (for Zaikin, Tal'nishnikh, Morkovin, Galagan, L'vovyy).

(Flax) (Flax processing machinery)

ANDREYEV, V.V.; FEDOTOV, V.G., veter. vrach; FEFERMAN, A.Ye.,
red.

[Enriching feeds with chemical products] Obogashchenie
kormov khimicheskimi produktami. Moskva, Rossel'khoziz-
dat, 1964. 54 p. (MIRA 17:8)

1. Glavnyy zootekhnik po kormoispol'zovaniyu Ministerstva
proizvodstva i zagotovki sel'skokhozyaystvennykh produktov
RSFSR (for Andreyev).

SUKHOV, V.P., inzh.; SATAYEV, R.A., inzh.; ANDREYEV, V.V., inzh.

Using the ADS-1000-2 automatic machine for welding fillet
girth joints. Svar. proizvod. no.8:31-32 Ag '64. (MIRA 17:9)

1. Bakinskiy mashinostroitel'nyy zavod im. Sardarova (for
Sukhov). 2. Azerbaydzhanskiy nauchno-issledovatel'skiy institut
neftyanogo mashinostroyeniya (for Satayev, Andreyev).

RUD', G.Ya.; MALTABAR, V.M., kand.sel'skokhoz.nauk; UL'YANKIN, M.G.;
ANDREYEV, V.V.; FROLOVA, Zh.N.; REVENOK, I.D.

Mechanized continuous V-KS-100 production line for the processing
of grapes to brandy alcohol. Trudy MNIIP 4:3-12 '64. (MIRA 18:1)

ANDREYEV, V. V.

SA

1968. Universal equation of the transient conditions of a synchronous machine. ANDREYEV, V. V. *Elek. St.*, 20 (No. 2) 44-6 (1969) In Russian.--The transient condition of a synchronous machine is determined by 5 electrical characteristics, voltage, frequency, field current, useful and reactive power, respectively. An analytical relation between these can be set up by combining the equations of the Potier diagram and of Dwight's circle diagram. B. F. K.

Card. Tech. Sci.

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

ANDREYAN, V. V.

Math Tech Sci

Dissertation: "Investigation of the Resistance of the
Direct and Euro Orders of the Airplane Three-Engine Network."

12/ /50

Moscow Order of L. in Aviation Inst inani Gergo Ordzhonikidze.

EO Vecheryaya Moskva
Sum 71

189T28

ANDREYEV, V. V.

USSR/Electricity - Transients
Power Systems

May 51

"The Calculation of Transients Occurring During
Asymmetrical Short-Circuits in Circuits With
Series-Connected Capacitance," V. V. Andreyev,
Cand Tech Sci, Sci Res Inst of Direct Current
"Elektrichestvo" No 5, pp 63-66

States method of calcg elec circuits with
series-connected capacitance under transient
conditions. This problem arises when capac-
tance is connected in series in elec circuits

189T28

USSR/Electricity - Transients
Power Systems (Contd) May 51

of various voltages and extent in order to re-
duce their equly reactances, which practice
seems certain to be introduced in power sys-
tems. Submitted 2 Jun 50.

189T28

S.A.
Inst. B

ANDREYEV, V.V.

Transmission

621.315.051.025.4

3120. Four-phase transmission system with three-phase transformers. V. V. ANDREYEV. *Elektricheskoye*, No. 1, 15-17 (1952) in Russian.

The drawback of the two-wire-earth system which is frequently used for rural distribution is the return current in the ground. Its doubling, however, removes this undesirable feature and leads to the 4-wire system which is symmetrical with respect to earth and reduces capital outlay on conductors and copper losses to less than half the value corresponding to normal 3-ph. systems. On either end an even number of identical transformers (interconnected) is required. These must be calculated for operation with an isolated neutral, i.e. insulated for full line-voltage. Three different line voltages are available which, in terms of the secondary phase voltage, are in the ratios $\sqrt{3}V_{ph} : 3V_{ph} : 2\sqrt{3}V_{ph}$. The system is suitable for up to 2×35 kV. The asymmetry of currents and voltages on the l.v. side introduced by the presence of conductor resistance in only two phases is not very troublesome up to 35 kV; also, it may be overcome by the use of transformers of different transformation ratios for the individual phases, by longitudinal compensation or insertion of reactors between corresponding phases.

B. P. F. HALL

~~ANDREYEV, V.V.~~, kandidat tekhnicheskikh nauk; ROZOVSKIY, Yu.A., kandidat tekhnicheskikh nauk; MARCHENKO, Ye.A., inzhener; MELIK-SARKISOV, B.S., inzhener.

Remarks on G.I. Atabekov's article "Problems of relay protection of electric transmission lines with longitudinal capacity compensation." Elektrichestvo no. 4:73-74 Ap '54. (MLRA 7:5)

1. Nauchno-issledovatel'skiy institut postoyannogo toka.
(Electric lines) (Atabekov, G. I.)

Andreyev, V. V.

AID P - 1209

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 4/34

Author : Andreyev, V. V., Kand. of Tech. Sci.

Title : ~~Transient state analysis in linear network by the method of envelope function~~
Transient state analysis in linear network by the method of envelope function

Periodical : Elektrichestvo, 12, 18-22, D 1954

Abstract : The author analyses a transient state resulting from the application of an ideal sinusoidal voltage of ω_{∞} frequency to any passive linear network with no energy stored. The equation of the transient process expresses a family of curves for which the author finds an envelope function, thus avoiding the construction of the curves themselves. He gives an analytical and graphic method of constructing such an envelope with the help of a vectorial-hodographic diagram. The envelope function permits determining directly the maximum of the shock voltage and also deducting the critical value of the phase at which this maximum occurs. He gives a numerical example. Two diagrams.

Elektrichestvo, 12, 18-22, D 1954

AID P - 1209

Card 2/2 Pub. 27 - 4/34

Institution : D-c Scientific Research Institute

Submitted : My 7, 1954

ANDREYEV, V.V., kandidat tekhnicheskikh nauk.

Double-wire three-phase line. Trudy MAI no.57:52-60 '56.

(MLRA 9:10)

(Electric lines)

ANDREYEV, V.V., kandidat tekhnicheskikh nauk.

Determining the symmetrical current components of three-phase generator loads under conditions of non-symmetrical connections of units. Trudy MAI no.57:71-75 '56. (MLRA 9:10)

(Airplanes--Electric equipment)

8(2)

AUTHOR:

Andreyev, Valentin Vasil'yevich,
Docent

SOV/161-59-1-15/25

Candidate of Technical Sciences,

TITLE:

Temperature Compensation of the Voltage Regulator and the Voltage Relay by Means of a Compensation Winding

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Elektromekhanika i avtomatika, 1959, Nr 1, pp 120-125 (USSR)

ABSTRACT:

The action of the temperature compensation winding which stabilizes the resulting magnetizing force of a voltage regulator or voltage relay in a certain temperature range is investigated here. The temperature compensation winding is wound on a common spool opposite to the main working winding of the apparatus. The magnetic flux develops, therefore, in the apparatus due to the difference in the magnetizing forces of both windings. Formula (1) for the resulting magnetizing force of the apparatus is written down, and formula (12) for the error during the temperature compensation is derived. The sequence in the calculation of the windings for the voltage relay and the voltage regulator is shown. The relative accuracy of temperature compensation can also be judged from formula (12) ✓

Ca1d 1/2

35334

S/194/62/000/001/012/066
D201/D305

9.7300 (1157)

AUTHOR: Andreyev, V. V.

TITLE: Devices transforming a continuously varying voltage into the discrete form (of the type n/d converter)

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 1, 1962, abstract 1-2-18yu (Dokl. Mosk. s-kh. akad. im. K. A. Timiryazeva, 1961, no. 66, 31-36)

TEXT: Basic methods of transforming continuous quantities into discrete ones are considered together with the theoretical transformation problems, the transformation frequency characteristics and a converter operating on the principle of the voltage step-compensation. The following basic methods of conversion are analyzed: Pulse time coding, space-coding and voltage step-compensation. The block diagram and the main circuitry of a converter using a П-14 (P-14) transistor is described. Characteristics of the converter are as follows: Speed of operation - 20 - 30 conversions per second, sensitivity 10 - 15 microvolts, input resistance ~50 kw, ✓

Card 1/2

ANDREYEV, V.V.

Calculating temperature compensation for regulators and
voltage relays. Trudy MAI no.145:5-18 '62. (MIRA 15:9)
(Voltage regulators)

ANDREYEV, V.V.

Increasing economic effectiveness of automatic lines.

Trakt. i sel'khoz mash. no. 12:36-37 D '65.

(MIRA 18:12)

1. Nauchno-issledovatel'skiy ekonomicheskiy institut pri
Gosplane SSSR.

ANDREEV, V.V.

ANDREYEV, V.V.

Production of free-flowing pressing powders of plastic amines. V. V. Andreev. *Khim. Prom.* 1946, No. 7/8,

16.—The effect of cellulose and hexamethylenetetramine on the free-flowing properties of pressing powders compounded of urea, CH_2O , oxalic acid, cellulose, and hexamethylenetetramine was studied. The rate of flow increases with an increase in the hexamethylenetetramine content but decreases with an increase in the cellulose content. The molding properties and the quality of the molded product are detd. by the flowing properties of the powder. Slow-flowing powders cause under-pressing, while excessively flowing powders yield moldings which soften when boiled in H_2O . The relative quantities of cellulose and hexamethylenetetramine for 5 groups of powders having graduated flow properties (detd. by the Raschig method) were detd. M. Hosh

ANDREYEV, V.V.

Synthesis of isopropenylurea, A. M. Shur and V. V. Andreyev, *Uchenye Zapiski Kazansk. Univ.* 7, 85-9 (1953); *Russk. Zhur., Kazan.* 1954, No. 44617. — [Throughout this abstr. R = 2-furyl.] $\text{CH}_2=\text{CMeR}$ (I) was synthesized by dehydration of RCMe_2OH (II) which in turn was obtained from RCO_2Et (III) and MeMgI (IV). Attempts at using RCO_2CH_3 (V) as starting material gave neg. results. III was used instead of RCO_2Me (VI) because of low yields obtained in synthesizing VI from RCO_2H (VII) and CH_3N_3 . VI b, 181°. I is a colorless liquid, b_p 123.0°, n_D^{20} 1.4970, d_4^{20} 0.9387. In the absence of catalysts I did not polymerize; heating 48 hrs. at 160° caused only slight thickening. Heating I on a water bath sealed in an ampul in the presence of SnCl_4 for 10 hrs. induced the formation of a soft resin of yellow or reddish color. V, obtained (59%) from $(\text{CH}_3\text{OH})_2$ and VII (cf. Abramova and Bgorova, *C.A.* 46, 10148d), m. 106-10°. To obtain III, abs. alc. was added dropwise over a period of 6 hrs. to 95% VII while the reaction mixt. was being heated on an oil bath. The max. yield (86.5%) of III was obtained when the ratio of VII to alc. was 6:1 and the temp. 180-90°. III m. 34°, b_p 101°. To 28 g. III in 100 ml. abs. ether was added an ether soln. of IV (10g; Mg, MeI 62 g., and ether 80 ml.). The reaction mixt. was treated as usual. Dehydration of II starts after driving off the ether. The fraction b. 80-165° was collected, the aq. layer sepd., dried over anhyd. Na_2SO_4 , and redistd. to give 4 g. I. M. Hozch

①

2.A. V-48
Jan 10, 1954
Synthetic Resins
and Plastics

②
mat

The toxicity of the heat-insulating plastic prepared from urea and formaldehyde. V. V. Andrey and T. I. Sokolova. *Farmakol. i Toksikol.* 16, No. 4, 45-7 (1953).—The heat-insulating plastic (I) prepd. from HCHO and urea (as a tar) is porous. It is prepd. in plates (sp. gr. 0.03) and crumbs, which break easily but do not burn. At 180-200°, it is carbonized and decompd. to form gases. A complete decompn. takes place at 400-500°. On an open flame the decompn. is quick and complete. Among the formed gases HCN is found, the presence of which was detected by absorbing the gases with a dil. alkali with the formation of Prussian blue. When 1 kg. of the plastic is burned 4,738 g. HCN is formed. Burning 0.15 g. plastic causes the death of mice after 1-2 min. (0.71 mg. HCN is produced). L. Goldenberg

10-12-54
mg

ANDREYEV, V.V.

USSR/Chemistry - Analysis of ores

Card 1/1 Pub. 151 - 6/37

Authors : Andreyev, V. V.

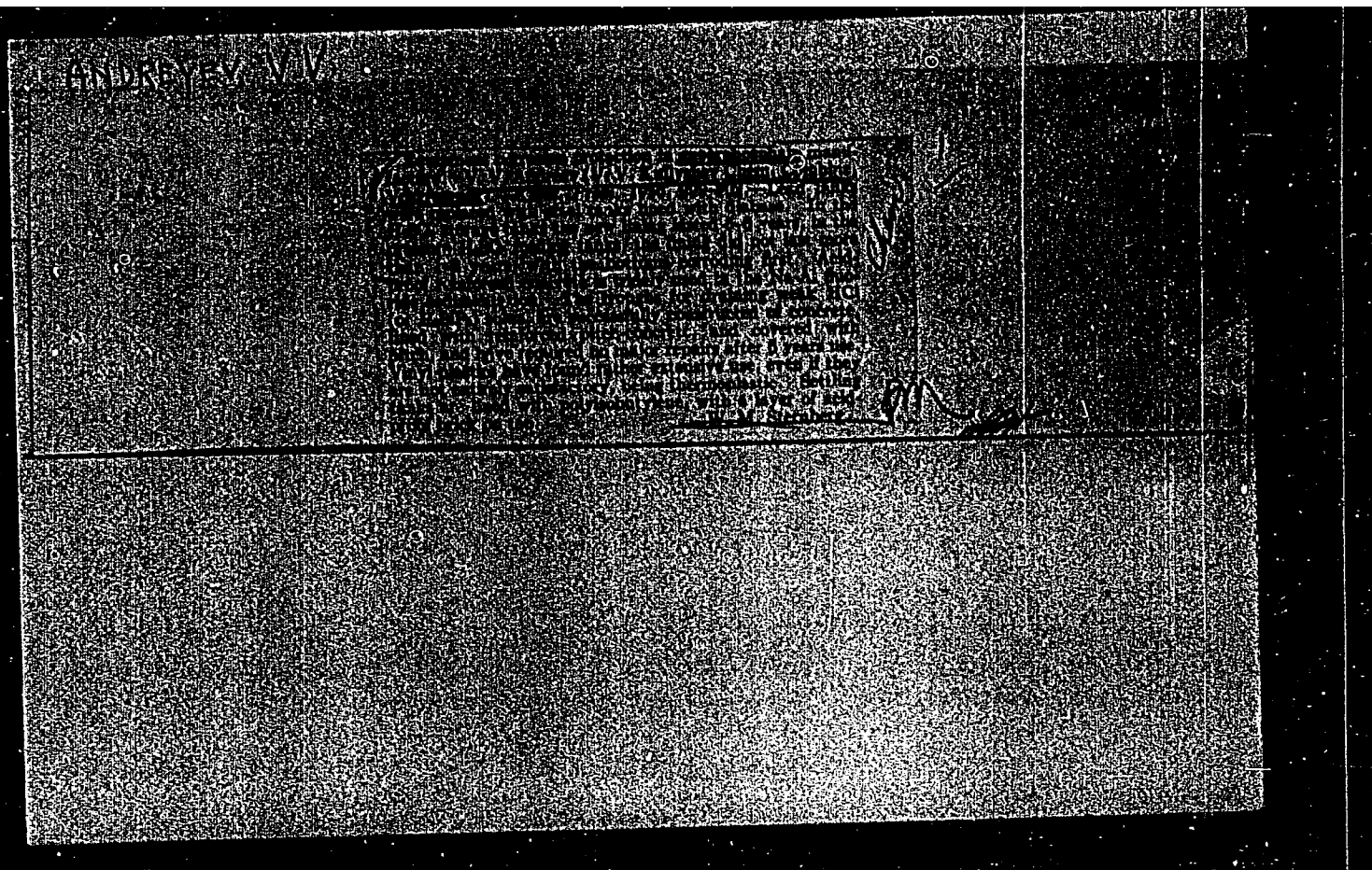
Title : Solubility of ammonium metavanadate in aqueous ammonium chloride solutions

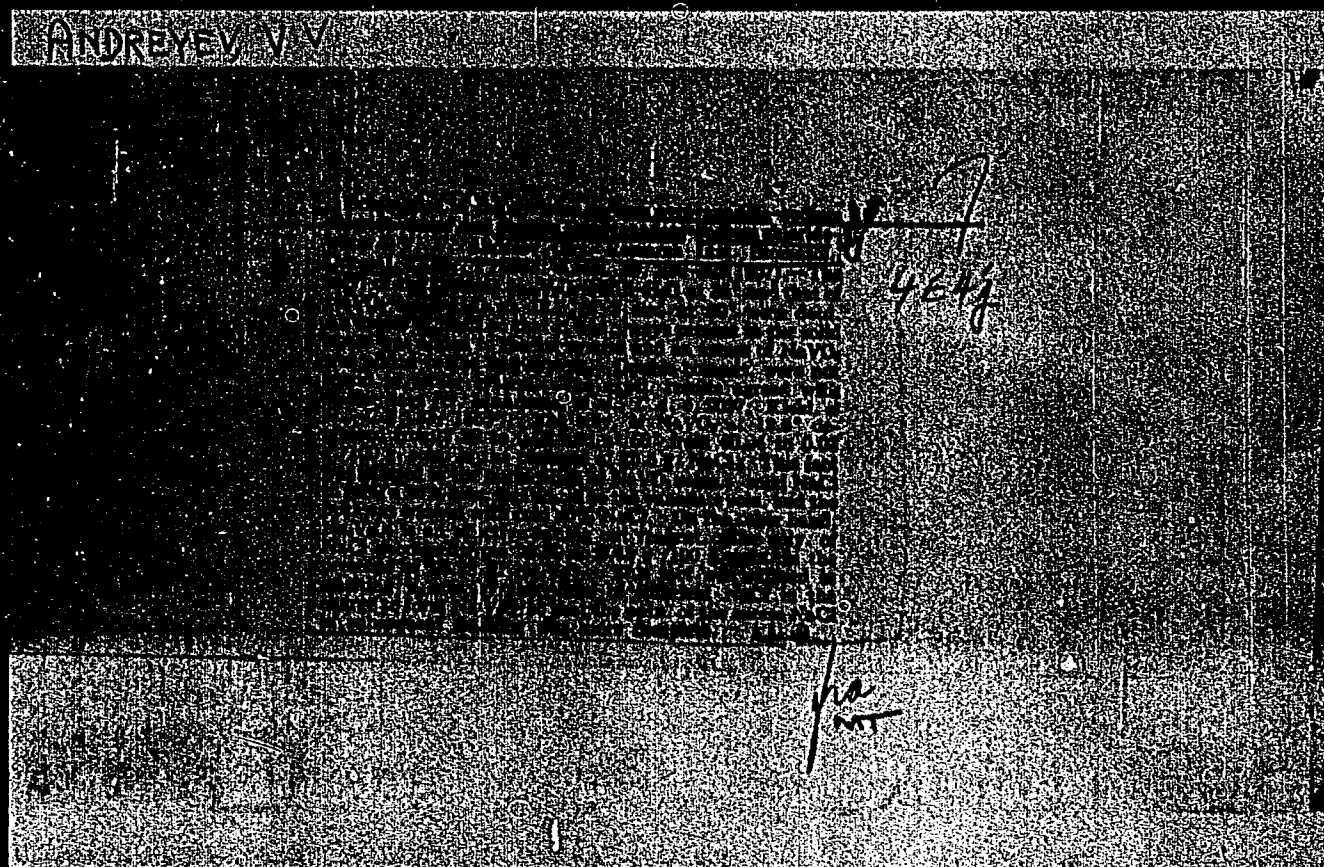
Periodical : Zhur. ob. khim. 24/10, 1730-1734, Oct 1954

Abstract : The optimum conditions for the separation and washing of ammonium metavanadate, with the aid of ammonium chloride, were determined on the basis of data pertaining to combined solubility of ammonium metavanadate and ammonium chloride in water. The temperatures and aluminum chloride concentrations in the solution, at which complete salting out of ammonium metavanadate normally takes place, are tabulated. The method applied in determining the solubility of ammonium metavanadate in aqueous ammonium chloride solutions is described. Thirty references: 10-USA; 9-USSR; 9-German and 2-French (1864-1947).
Table; graphs.

Institution : Scientific Research Stomatological Institute, Odessa

Submitted : June 25, 1954





ANDREYEV, V.

LYASHENKO, V., ZOTOV, V., IVANOV, V., and ANDREYEV, V.

"Corrosion Resistance of Certain Materials in Sodium and Lithium."

paper to be presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic Energy, Geneva, 1 - 13 Sep 58.

5(2)

SCV/78-4-10-33/40

AUTHOR: Andreyev, V. V.

TITLE: Preparation of Ammonium Metavanadate From Sodium Vanadates

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 10,
pp 2384 - 2389 (USSR)

ABSTRACT: On addition of ammonium salts to the aqueous solution of alkali-ortho-, pyro- or metavanadate always ammonium vanadate precipitates. Since precise data on this reaction are not available in publications, the solubility of the following systems was investigated: 1) $\text{NH}_4\text{VO}_3 - \text{Na}_2\text{V}_2\text{O}_7 - \text{H}_2\text{O}$ at 35° (Table 1); 2) $\text{NH}_4\text{VO}_3 - \text{NaVO}_3 - \text{H}_2\text{O}$ (Table 2); 3) $\text{NaVO}_3 - \text{NH}_4\text{Cl} - \text{H}_2\text{O}$ at 12.5° (Table 3), and 4) $\text{NH}_4\text{VO}_3 - \text{NaCl} - \text{H}_2\text{O}$ at 12.5° (Table 4). The liberation of ammonia in the systems 1 and 2 indicates a chemical reaction which takes place also on addition of ammonium chloride to sodium vanadate and is expressed by the equations: $2\text{Na}_3\text{VO}_4 + 2\text{NH}_4\text{Cl} + \text{H}_2\text{O} = \text{Na}_2\text{V}_2\text{O}_7 + 2\text{NaCl} + 2\text{NH}_4\text{OH}$ (1); $\text{Na}_2\text{V}_2\text{O}_7 + 2\text{NH}_4\text{Cl} + \text{H}_2\text{O} = 2\text{NaVO}_3 + 2\text{NaCl} + 2\text{NH}_4\text{OH}$ (2); $\text{NaVO}_3 + \text{NH}_4\text{Cl} + \text{H}_2\text{O} = \text{HVO}_3 + \text{NaCl} + \text{NH}_4\text{OH} \rightarrow \text{NH}_4\text{VO}_3 + \text{H}_2\text{O} + \text{NaCl}$ (3). After heating considerable hydrolysis and ammonia separation occurs, the ammonium vanadate

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Preparation of Ammonium Metavanadate From Sodium
Vanadates

SOV/78--10-33/40

thus being contaminated by vanadic acid and polyvanadates. The precipitation of ammonium vanadate must therefore be carried out always in cold solution. As can be seen from the equations (1) - (3), a gradual transformation of sodium orthovanadate via pyrovanadate to metavanadate takes place. Only after this the precipitation of ammonium metavanadate takes place. The ammonium chloride addition must therefore be calculated according to equation (3) (1 mole NH_4Cl per 1 mole Na) and an excess ammonium chloride must be provided which corresponds to a 3.3% NH_4Cl solution and guarantees the complete precipitation of the ammonium vanadate (Table 3). There are 1 figure, 4 tables, and 6 references, 5 of which are Soviet.

ASSOCIATION: Odesskiy nauchno-issledovatel'skiy stomatologicheskii institut
(Odessa Scientific Research Institute of Stomatology)

SUBMITTED: July 11, 1958

Card 2/2

L 09206-67 EWT(m)/EWP(k)/EWP(t)/ETI IJP(c) JD
ACC NR: AP7002775

SOURCE CODE: UR/0418/66/000/002/0028/-331

MALINOVSKIY, I. A., FEDORCHENKO, V. Ye., ZARUBINSKIY, M. A., and ANDREYEV,
V. V., Engineers

ORG: none

"Production of the Slurry Pump Rotors of Alloy IChKh28N2 by Investment Casting"

Kiev, Tekhnologiya i Organizatsiya Proizvodstva, No 2, 66, pp 28-31

TOPIC TAGS: metal casting, chromium containing alloy

ABSTRACT: The "Ukr NIiuglemashobogashcheniye" institute developed and tested a technical process for making rotors of alloy IChKh28N2 by investment casting to reduce as much as possible the amount of mechanical working, to increase the fineness and accuracy of the geometric molds of rotor surfaces. This method permits accurate casting of any difficult-to-work cast alloy.

The chemical composition of alloy IChKh28N2 is as follows: C 2.7-2.9%, Si 0.8-1.1%, Mn 1.5-1.8%, Cr 28-30%, Ni 1.5-2.8%, S 0.04% and P 0.09%; Brinell hardness in the cast state was 474-502.

The microstructure of the casting consisted of fine and coarse carbides (Cr, Fe)₇C₃.

By hardening at 1100° and subsequent tempering at 550-600°C the hardness

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UDC: 621.74.04

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ACC NR: AP7002775

of the castings can be increased to 540-600 Brinell units. Thereby, the wear resistance of the alloy is increased.

The results of comparative tests of experimental specimen rotors made of the alloy IChKh28N2 and of series produced rotors made of cast iron SCh15-32 is as follows: 16

Alloy	Average weight kg	Average actual operating time before total	Average weight after tests, kg	Weight loss, kg	Wear for 100 hours, kg	Coefficient of relative wear resis- tance of the rotors
IChKh28N2	21.8	4288	15.1	6.7	0.16	-
Cast iron						
SCh 15-32	22.5	330	16.3	6.2	1.88	11.7

Orig. art. has: 3 figures and 3 tables. [JPRS: 37,428]

SUB CODE: 13, 11 / SUBM DATE: none

Card 2/2 5/10

L 56492-65
ACCESSION NR: AP5017800

UR/0286/65/000/011/0031/0031
631.859.12.002.2

AUTHOR: Karatayev, I. I.; Mel'nik, B. D.; Repenkova, T. G.; Sviridova, A. G.;
~~Doktorov, N. I.~~; Nazarov, G. N.; Raygorodskiy, I. M.; Vasil'yev, B. T.; Bystrov,
M. V.; Babaryka, I. F.; Kuzyak, F. A.; Fel'dman, M. V.; Soverchenko, D. A.;
Buslakova, L. P.; Toroptseva, N. P.; Lyubimov, S. V.; Ul'yanov, A. T.; Andres,
V. V.; Sobchuk, Yu. I.; Teetlina, M. M.; Andreyev, V. V.; Kramer, G. L.

TITLE: A method for producing phosphoro-potassium fertilizers. Class 16, No. 171-409

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 31

TOPIC TAGS: fertilizer, phosphate, potassium

ABSTRACT: This Author's Certificate introduces a method for producing phosphoro-potassium fertilizers using cement dust (waste from cement production) as the potassium raw material. The process of adding potassium to the product is simplified and evaporation is prevented by using a 20% excess of an acid which directly neutralizes the cement dust for breaking down the phosphate raw material.

Card 1/2

L 56492-65

ACCESSION NR: AP5017800

ASSOCIATION: none

SUBMITTED: 29Mar62

ENCL: 00

SUB CODE: GC, LS

NO REF SOV: 000

OTHER: 000

2/2
2/2

ANDREYEV, V.V.; PANASYUK, E.V.

Use of the ion exchange method for the extraction of tartaric acid.
Trudy MNIIP 4s48-51 '64.

Determining of tartaric acid by the colorimetric method. Ibid. 162-68
(MIRA 18.1)

ANDREYEV, V.V. (Moskva); BOBROV, G.V. (Moskva); POLEZHAYEV, M.A., (Moskva)

Making molybdenum parts by the method of plasma spraying.
Forosh. met. 5 no.10:38-46 O '65. (MIRA 18:11)

24(3)

SOV/56-35-5-22/56

AUTHORS: Andreyev, V. V., Gerasimenko, V. I.

TITLE: On the Theory of Paramagnetic Resonance and Paramagnetic Relaxation in Metals (K teorii paramagnitnogo rezonansa i paramagnitnoy relaksatsii v metallakh)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol 35, Nr 5, pp 1209-1215 (USSR)

ABSTRACT: The recent times further development of the theory of paramagnetic resonance is based either upon the conception of the diffusion of electrons from the skin layer (Ref 1) or on using the kinetic equation for the electron density operator (Refs 2, 3). Overhauser (Overkhauzer) (Ref 4) and Elliott (Ref 5) devoted special attention to spin relaxation and investigated various kinds of spin interaction. Also the authors of the present paper investigated especially the spin relaxation mechanism, i.e. consideration of the influence exercised by spin-orbit coupling upon the interaction between electrons and lattice oscillations. For the purpose of setting up the kinetic equation the authors used the method of statistical operators for the quantum system (Ref 6). Already Gurzhi (Ref 7) used this

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SOV/56-35-6-22/56

On the Theory of Paramagnetic Resonance and Paramagnetic Relaxation in Metals

method for the purpose of investigating conductivity electrons without taking their spins into account. The authors set up a kinetic equation for conductivity electrons in metals, in which case the electron spin and spin-orbit interaction with the periodic field of the lattice are taken into account. The electrons are not in interaction. The kinetic equation obtained is suited for investigating paramagnetic resonance. The case of the homogeneous distribution of an alternating field in a metal is considered in detail. It is shown that for temperatures $kT \gg \mu H_0$ "longitudinal" and "transversal" spin relaxation times can be introduced, which are practically equal to each other. In conclusion, the authors thank Professor I. M. Lifshits for discussing the results obtained. There are 9 references, 4 of which are Soviet.

ASSOCIATION: Fiziko-tehnicheskiy institut Akademii nauk Ukrainskoy SSR
(Physico-Technical Institute of the Academy of Sciences,
Ukrainskaya SSR)

Card 2/3

Report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics,
Moscow, 27 Jan - 1 Feb '50.

1. A. A. Abkhazi, A. F. Kozlov, L. A. Shvartz (Moscow): Supersonic motion of viscoplastic shells and the basis for improving well construction.
2. A. A. Abkhazi, V. M. Kozlov, L. A. Shvartz (Moscow): Best transfer in moving viscoplastic and viscoplastic shells.
3. L. A. Abkhazi (Moscow): Torsion of cylindrical shells.
4. L. A. Abkhazi, A. A. Ryzhikov (Moscow): Torsion of circular hollow shells with longitudinal bracing.
5. L. A. Abkhazi, A. A. Ryzhikov, V. M. Kozlov (Moscow): Buckling and post-buckling behavior of shells under dynamic loading.
6. L. A. Abkhazi (Moscow): Some relations between the addition of plates and asymmetrical problems in the theory of elasticity.
7. L. A. Abkhazi (Moscow): Experimental investigation of the same viscoplastic problem by means of photoelastic films.
8. L. A. Abkhazi, N. A. Kozlov (Moscow): Some initial problems in elasticity.
9. L. A. Abkhazi, V. M. Kozlov, L. A. Shvartz (Moscow): The film of a prism, bars under transverse stress.
10. L. A. Abkhazi (Moscow): Two-dimensional bodies of equal strength.
11. L. A. Abkhazi (Moscow): Asymmetrical torsion of an elastic material shell.
12. L. A. Abkhazi (Moscow): On the theory of elastostatic shells and plates.
13. L. A. Abkhazi, L. A. Shvartz (Moscow): Some problems in the theory of elastostatic (non-orthotropic) shells.
14. L. A. Abkhazi (Moscow): Stability analysis of a stiffened cylindrical shell under axial compression.
15. V. V. Anisimov, A. A. Kozlov, L. A. Shvartz (Moscow): The stability of a shell under dynamic loading.
16. L. A. Abkhazi (Moscow): The stress distribution in a heavy shell under dynamic loading.
17. L. A. Abkhazi (Moscow): The stress distribution in a heavy shell under dynamic loading.
18. L. A. Abkhazi (Moscow): The stress distribution in a heavy shell under dynamic loading.
19. L. A. Abkhazi (Moscow): The stress distribution in a heavy shell under dynamic loading.
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30. L. A. Abkhazi (Moscow): The stress distribution in a heavy shell under dynamic loading.
31. L. A. Abkhazi (Moscow): The stress distribution in a heavy shell under dynamic loading.
32. L. A. Abkhazi (Moscow): The stress distribution in a heavy shell under dynamic loading.
33. L. A. Abkhazi (Moscow): The stress distribution in a heavy shell under dynamic loading.
34. L. A. Abkhazi (Moscow): The stress distribution in a heavy shell under dynamic loading.

ANDREYEV, V.V.

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1045 1555 1527

27947

S/185/60/005/004/006/021
D274/D306

AUTHORS: Kosevych, A.M., Andryeyev, V.V. and Tanatarov, L.V.

TITLE: Inelastic deformation and residual strains of a flat solid layer under polymorphic transformation

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 5, no. 4, 1960, 479-485

TEXT: An infinite isotropic layer is considered which has two phases (I and II) with different physical properties (in particular, with different specific volumes, whereby $\Delta V/V = 3\epsilon_0$). If the surface temperature of the phase-I layer reaches the value of polymorphic-transformation temperature (transition from solid phase I to solid phase II) or exceeds it, then the phase-II layer is formed. Assuming that at the phase boundary the infinitely thin, deformed, phase-I layer passes into phase-II which remains attached to the phase-I layer, then, owing to the different specific volumes of the phases, a stress-strain state of the specimen as a whole arises;

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D274/D306

Inelastic deformation...

this state changes with time in accordance with phase-boundary displacements. The case is investigated when the relative change in volume of the body due to phase transformation exceeds the deformations corresponding to the elastic-limits of the phases. Such a problem is encountered in considering mechanical processes in solids which take place at cyclical temperature regimes, the surface temperature passing repeatedly through the polymorphic-transformation point. The problem was dealt with, where the observed effect was entirely due to plastic deformations, while neglecting relaxation stresses, by two of the authors (Ref. 2: A.M. Kosevych, L.V. Tanatarov, Fizika metallov i metallovedeniye, 8, 225, 1959). In the present article, the relaxation processes are taken into account. The hysteresis character of the plastic deformations, as well as the relaxation stresses, lead to residual strains in the specimen (after it passed into the new phase). These residual strains cause irreversible changes in shape of the specimen. The principal assumptions and equations are similar (in the present article) with those of Ref. 2 (Op. cit), but the results differ substantially,

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27947 S/185/60/005/004/006/021
D274/D306

Inelastic deformation...

since the relaxation stresses involve the dependence of the residual strains on the rate of motion of the boundary phases, i.e. on the heating and cooling temperatures. Two cases are considered: a) the relaxation time τ is large as compared to the phase transition time T ; b) τ is smaller than $2T$. Case a) A system of differential equations is set up for the stress tensor σ . These equations are solved by the method of successive approximations, after expanding in terms of the small parameter T/τ . The residual strain is given, in the first approximation, by

$$u_2^1(T) = \frac{1}{ah\tau} e^{F(T)} \int_0^T q(t) e^{-F(t)} dt, \quad (12)$$

where

$$q(t) = \left[1 - \frac{\psi_1'(\epsilon_0 - u_0(t))}{\alpha} \right] x_0(t) \psi_1(\epsilon_0 - u_0(t)) - \frac{1}{\alpha} \int_0^t \psi_1(\epsilon_0 - u_0(t)) dt \frac{d}{dt} [x_0(t) \psi_1'(\epsilon_0 - u_0(t))], \quad (13)$$

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279475/185/60/005/004/006/021
D274/D306

Inelastic deformation...

u being the strain tensor, ψ being related to plastic deformations;
for the residual strain, inequality

$$0 < u_2^i(T) < 2 \frac{\psi_1(\epsilon_0)}{\alpha} \left(\frac{T}{\tau} \right) e^{F(T)}. \quad (14)$$

holds, where $F(T) \sim 1$ if $\epsilon_0 \sim e_s$ (e_s being the strain at the elastic limit). From these formulas it follows that the relaxation can only increase the residual strain during one-directional phase-transitions, that the residual strain depends on the velocity of the boundary phases and on T , and that in a cyclical process $I \rightarrow II \rightarrow I$ the residual strain depends in magnitude as well as in sign, on the heating and cooling temperatures. Case b) By assuming $\epsilon_0 \gg e_s$, the calculations are considerably simplified. For $\tau < 2T$, the deformation of the specimen is given by

$$u_2(t) = \epsilon_0 + e_s \left(1 + \frac{t}{\tau} - \exp \left(1 - \frac{t}{\tau} - \frac{x_0(t)}{h} \right) \right) \quad (19)$$

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Inelastic deformation...

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D274/D306

ASSOCIATION: Fizyko-tekhnichnyy instytut A. USSR (Physico-technical Institute AS UkrSSR)

SUBMITTED: December 23, 1959

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Card 6/6

KOSEVICH, A.M.; ANDREYEV, V.V.

Quantum analog of the collision integral for electrons in
magnetic and electric fields. Zhur.eksp.i teor.fiz. 15
no.3:882-888 Mr '60. (MIRA 13:7)

1. Fiziko-tekhnicheskoy institut Akademii nauk Ukrainskoy
SSR.

(Electrons) (Collisions(Nuclear physics))

83770

S/056/60/039/003/026/045
B006/B063

26.1410
24.2120
AUTHORS:

Andreyev, V. V., Kosevich, A. M.

TITLE:

Quantum Oscillations of the Coefficient of Thermal
Conductivity of an Electron Gas in a Magnetic Field

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,
Vol. 39, No. 3(9), pp. 741-745

TEXT: At low temperatures, the thermal conductivity of metals in a magnetic field shows a special feature that is similar to the Shubnikov - de Haas effect. The electronic part of the thermal conductivity of metals is held responsible for the oscillations of thermal conductivity observed in the magnetic field; a theoretical investigation of the quantum oscillations of this electronic part was the aim of the authors. The present paper describes a study of quantum corrections to the classical coefficient of thermal conductivity (which is a smooth function of the magnetic field) within the framework of the free conduction electron gas model. The thermal distribution of this electron gas is supposed to have a slight, constant gradient (grad T) perpendicular to the outer homogeneous

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83770

Quantum Oscillations of the Coefficient of Thermal Conductivity of an Electron Gas in a Magnetic Field

S/056/60/039/003/026/045

B006/B063

H-field. The electron density is assumed to be so high that

$\theta \equiv kT \ll \xi$ and $\hbar\omega \ll \xi$ (ξ - chemical potential of the electron gas, $\omega = eH/mc$). Under these conditions the problem can be treated in a quasi-classical approximation. Only the scattering of electrons by impurities is considered in the calculation of kinetic coefficients, and the impurity concentration is supposed to be low. In the course of time a steady state will appear, for whose relaxation time τ the condition $\omega\tau \gg 1$ is assumed to hold. The two conditions $\hbar\omega \ll \xi$ and $\omega\tau \gg 1$ are easily satisfied at the same time for metals at low temperatures. The quantities $1/\omega\tau$ and $\hbar\omega/\xi$ are the small parameters which are expanded in a power series. The state of the electron gas found when considering the scattering of electrons by impurities is described by the statistical single-particle parameter q (cf. previous paper by the authors, Ref. 3). The method described here for expanding the kinetic coefficients in a power series of the small parameters permits studying the thermal conductivity of an electron gas following an arbitrary dispersion law. For reasons of simplicity, however, an isotropic quadratic dispersion law is assumed here. It is found that the oscillating part of the coefficient

Card 2/3

83770

Quantum Oscillations of the Coefficient of Thermal Conductivity of an Electron Gas in a Magnetic Field S/056/60/039/003/026/045
B006/B063

of thermal conductivity κ may be expressed in a simple manner by the oscillations of the specific electrical conductivity σ . Then, one obtains:

$$\pi^2 H^2 \frac{\partial^2}{\partial H^2} \left(\frac{\Delta \kappa}{\kappa_0} \right) = 3 \int_0(0)^2 \frac{\partial^2}{\partial \theta^2} \left(\frac{\Delta \sigma}{\sigma_0} \right),$$
 where $\int_0(0)$ is the classical chemical zero potential. $H \frac{\partial}{\partial H} \Delta \kappa \sim \frac{\xi_0}{\hbar \omega} \Delta \kappa$ and $\int_0 \frac{\partial}{\partial \theta} \Delta \sigma \sim \frac{\xi_0}{\hbar \omega} \Delta \sigma$ hold so that one obtains $\Delta \kappa / \kappa_0 \sim \Delta \sigma / \sigma_0$. At moderately low temperatures ($\hbar \omega < \mu$), $\Delta \kappa / \kappa = 3(\Delta \sigma / \sigma_0)$ holds. The authors thank I. M. Lifshitz and N. Ya. Azbel' for discussions. V. G. Skobov is mentioned. There are 7 references: 5 Soviet and 2 US.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk Ukrainskoy SSR
(Institute of Physics and Technology of the Academy of Sciences Ukrainskaya SSR)

SUBMITTED: April 9, 1960

Card 3/3

S/207/6/000/005/009/015
D237/D303

AUTHORS: Andreyev, V.V., Kosevich, A.M., and Tanatarov, L.V.
(Khar'kov)

TITLE: Deformation of a rod of circular cross-section in
phase transition

PERIODICAL: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki,
no. 5, 1961, 67 ... 70

TEXT: An incompressible cylindrical solid is considered and the phase transition is solid 1 $\rightarrow$ solid 2, their specific volumes differing from each other. The authors show that the equations describing the deformation of the cylinder are formally identical to those derived for the case of flat plate in (Ref. 1: Fizika metallov i metallovedeniye, 1959, 8, p. 255). If the surface temperature of the cylinder is equal or higher than the transition temperature, the boundary moves inwards and can be represented by a cylindrical surface. The velocity of the boundary is assumed to be known and mechanical stresses and strains are considered. The func-

Card 1/2

S/056/62/043/003/049/063
B108/B102

AUTHORS: Andreyev, V. V., Kosevich, A. M.

TITLE: On the quantum theory of the normal skin effect in a magnetic field at low temperatures

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 3(9), 1962, 1060 - 1067

TEXT: An electron gas in a strong uniform magnetic field under conditions of normal skin effect (weak variable electric field) is considered. The electron mean free time τ_0 is assumed to be greater than the time of revolution on an orbit in the magnetic field: $\Omega\tau_0 \gg 1$. Since quasi-classical approximation is used, this assumption is implicit in the condition $\hbar\Omega \ll \xi_0$ where ξ_0 is the Fermi boundary energy. The quantum kinetic equation, neglecting electron-electron interaction, has the form

$$\partial\rho/\partial t = (i/\hbar) \{[\rho, \mathcal{H}] + N \text{Sp}_\alpha [G_\alpha, U_\alpha]\}. \quad (4)$$

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On the quantum theory of the...

where N is the number of impurities per unit volume, U is the interaction potential of an electron with a point impurity, G is a binary correlative operator. The subscript α refers to the α -th impurity. Eq. (4) is linearized by using the substitutions $\rho = f(\epsilon) + \rho_1$ and $G = G_0 + G_1$. The quantum kinetic equation for the correction ρ_1 to the equilibrium density matrix is then

$$i\omega\rho_1 - (i\hbar) [\rho_1, \epsilon] + D_0(\rho_1) = (i\hbar) [f, \mathcal{H}_1] - eE_1(f), \quad (11),$$

$$D_0(\rho) = - (i\hbar) N \text{Sp}_2 [G_{02}, U_2], \quad eE_1(f) = - (i\hbar) N \text{Sp}_2 [G_{12}, U_2]. \quad (12).$$

Eq. (11) is solved for square-law isotropic dispersion of the electrons and scattering from point impurities. Conductivity in this case can be found from $j_i = e \text{Sp}_v \rho_1 = \sigma_{ik} E_k$. For the case of an arbitrary dispersion law and a small potential of the impurities, Eq. (11) is solved by means of perturbation theory. The electrical conductivity tensor is split into a classical part and a part subject to quantum oscillation, depending on the electron effective mass. Consequently, additional information on

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the electron effective mass can be gathered by studying the frequency dependence of the conductivity oscillations.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk Ukrainskoy SSR
(Physicotechnical Institute of the Academy of Sciences
Ukrainskaya SSR)

SUBMITTED: April 20, 1962

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L 8222-66

ACC NR: AP5026272 EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) MJW/JD/JG

SOURCE CODE: UR/0226/65/000/010/0038/0046

AUTHOR: Andreyev, V. V. (Moscow); Bobrov, G. V. (Moscow); Polezhayev, M. A. (Moscow)

ORG: none

TITLE: Manufacturing parts from molybdenum by plasma spraying ²⁷ ₅₇

SOURCE: Poroshkovaya metallurgiya, no. 10, 1965, 38-46

TOPIC TAGS: metal deposition, molybdenum deposition, molybdenum spraying, plasma spraying, deposited molybdenum structure, deposited molybdenum property, **MOLYBDENUM**

ABSTRACT: Tubular parts of various sizes and shapes were made of molybdenum by plasma arc spraying on AD-1, AMTs, or D16 aluminum alloy patterns. The spraying was done with a mixture of argon and helium in a 4 to 1 ratio. The deposits were annealed in a hydrogen atmosphere at 1200-1800C for 1-4 hr. The as-sprayed metal consisted of distinct layers of polycrystalline molybdenum interspersed with layers of nonmetallic inclusions and voids. Annealing at 1800C makes the layered structure less distinct and reduces the thickness of the interspersed layer, which then becomes similar to the grain boundaries of cast or wrought metal. Annealing at 1200-1400C, however, had no effect on the structure of deposited metal. A second phase, probably consisting of molybdenum oxides, was identified in the as-sprayed deposit. However, no second phase was observed after annealing at 1800C for 1 hr. The volume shrinkage of deposited molybdenum annealed for 2 hr at 1200, 1400, 1600, and 1800C was 1.0, 1.6, 5.8, and

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ACC NR: AP5026272

6.4%, respectively. The corresponding figures for the density were 8.50—8.89, 8.54—8.83, 8.66—8.98, and 9.05—9.35 g/cm³, compared with 8.76—8.95 g/cm² for as-sprayed metal. The tensile strength of the as-sprayed molybdenum, 3.1—5.6 dan/mm², increased to 8.3—13.5, 18.4—20.1, and 30.1—31.9 dan/mm² after annealing at 1800C for 1, 3, and 5 hr, respectively. The as-sprayed molybdenum had a hardness of 128—147.2 H_v; after annealing at 1800C for 1, 3, and 5 hr, the hardness was 171.0 to 225.0, 121.7—153.2, and 119.0—135.0 H_v, respectively. Annealing at 1800C greatly reduced the resistivity of deposit: from 31.8—33.8 mohm·cm for as-sprayed metal to 8.02 mohm·cm (80—85% of the resistivity of cast molybdenum) for metal annealed for 2 hr. Orig. art. has: 4 figures and 5 tables. [MS]

SUB CODE: 13, 11 / SUBM DATE: 06Mar65/ ORIG REF: 005/ OTH REF: 003/ ATD PRESS: 4148

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Card 2/2

ANDREYEV, V.V., inzh.

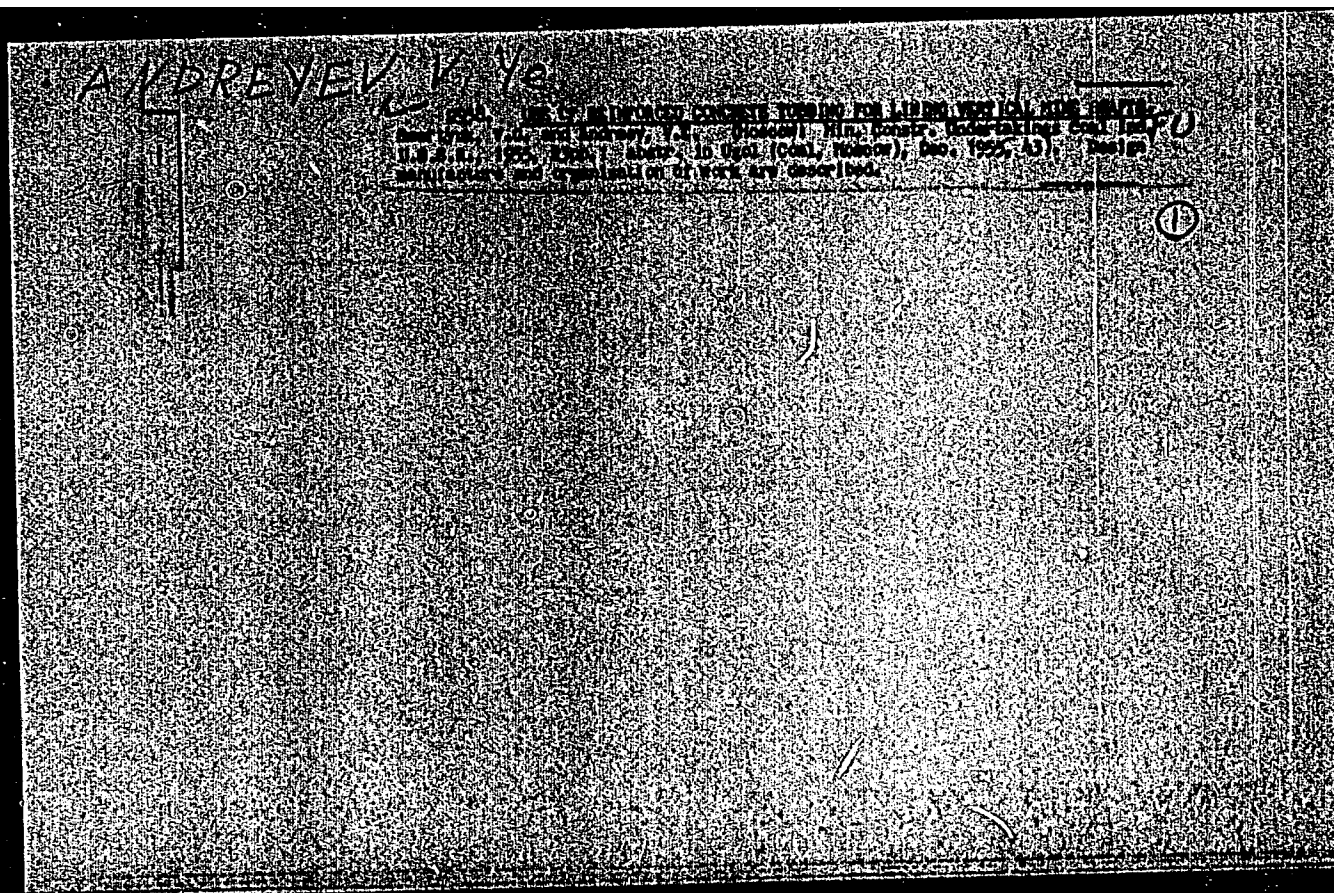
Analysis of the utilization of automatic lines and the means
for the increase of their economic efficiency. Mekh. i avtom.
proizv. 19 no.9:23-25 S '65. (MIRA 18:9)

COUNTRY : USSR
 CATEGORY : Farm animals.
 : The Honeybee.
 ABS. JOUR. : RZhBiol., No. 3, 1959, No. 12117
 AUTHOR : Andreyev, V. Ya.
 INST. : -
 TITLE : Improving the Feeding Base for Bees.

ORIG. PUB. : S. M. Pavkova, 1956, No 2, 76-77

ABSTRACT : In September 1956 because of frost (-2.6° C); buckwheat perished at the Krasnodarskiy kray, but kidney bean vegetated until 18 November when the temperature dropped to -7.5° and the bees eagerly visited these crops during the warm time of the day. Expressed in kg the production of nectar amounted per 1 ha to 200 for borage (*Borago officinalis*), to 250 for blue dragonhead (*Dracocephalum* L.) to 150-500 for kidney bean (*Phaseolus*), to 300 for white sweet

CARD: 1/2



ANDREYEV, Valentin Yefimovich [Andreiev, V.IU.]; CHURSIN, Nikolay
Ivanovich [Chursin, M.I.]; KOCHMERGA, M., red.; PATSALYUK, P.,
tekhn.red.

[Constructing a 102 meter vertical shaft reinforced by ferro-
concrete tubings within a month] 102 metry vertykal'noho
stvola zakriplenoho zalizobetonnyymi tiubinhamy za misiats'.
Kyiv, Derzh.vyd-vo tekhn.lit-ry URSR, 1957. 32 p.

(MIRA 12:9)

(Precast concrete construction) (Shaft sinking)

ANDREYEV, V.Ye., inzh.

Construction and use of engineering installations in coal mines.
Shakht. stroi. 4 no.4:25-26 Ap '60. (MIRA 13:11)

1. Donetskii nauchno-issledovatel'skiy institut nadshakhtnogo
stroitel'stva. (Sanitary engineering)
(Coal mines and mining)

ANDREYEV, V.Ye., inzh.

Use of multiple-rope hoists for sinking vertical shafts.
Shakht.stroi. 6 no.2:16-17 F '62. (MIRA 15:2)

1. Donetskij nauchno-issledovatel'skiy institut nadshakhtnogo
stroitel'stva.

(Hoisting machinery)

TARANETS, A.V., inzh.; ANDREYEV, V.Ye., inzh.; GOLUB', G.F., inzh.

Utilization of permanent buildings and structures in the
construction of coal mines. Ugol.prom. no.5:11-15 S-0 '62.
(MIRA 15:11)

1. Donetskii nauchno-issledovatel'skiy institut nadshakhtnogo
stroitel'stva.

(Mining engineering)

ANDREYEV, V.Ye., inzh.-shakhtostroitel'

New technology of coal mine construction. Ugol' Ukr. 6 no.9:
24-25 S '62. (MIRA 15:9)

1. Donetskij nauchno-issledovatel'skiy institut nadshakhtnogo
stroitel'stva.

(Mining engineering)

ANDREYEV, V.Ye., inzh.; MITROFANOV, B.M., inzh.; STOLOV, M.A., inzh.;
RYKOV, N.M., inzh.; KHZMALYAN, D.M., kand. tekhn. nauk

Burning of natural gas in thin jets in boilers with impact
mills. Teploenergetika 10 no.11:28-32 N '63.

(MIRA 17:1)

1. Upravleniye energeticheskoy promyshlennosti Soveta narod-
nogo khozyaystva BSSR i Moskovskiy energeticheskiy institut.

ANDREYEV, V.Ye., inzh.; RYABOV, B.M., kand.tekhn.nauk

Electrical strength of an epoxide compound in a nonuniform field.
Izv. vys. ucheb. zav.; energ. 7 no.3:33-37 Mr '64. (MIRA 17:4)

1. Leningradskiy politekhnicheskoy institut imeni M.I.Kalinina.
Predstavleny kafedroy tekhniki vysokikh napryazheniy.

ANDREYEV, V. Ya., inzh.; KYABOV, B. M., kand. tekhn. nauk

electrical strength of epoxide compounds at increased frequencies.
Izv. vys. ucheb. zav.; energ. 7 no. 5:105-108 Vy '64.
(MIRA 17:2)

1. Leningradskiy politekhnicheskiy institut imeni Kalinina.
Predstavleniya kafeдры tekhniki vysokikh napryazheniy.

ANDREYEV, V.Ye., inzh.

Analysis of flowsheets for mine shaft sinking using tower head-frames. Ugol'.prom. no.3:40-43 My-Je '62.

(MIRA 18:3)

1. Donetskij nauchno-issledovatel'skiy institut nadshakhtnogo stroitel'stva.

GORODNICHEV, V.M., kand. tekhn. nauk; ANDREYEV, V.Ye.; KLADOV,
G.M.; KUSHMET, V.G.; MELIKSETOV, S.S., retsenzent;
NOVIKOV, N.I., retsenzent;

[Construction of buildings and other structures for coal
mines] Stroitel'stvo zdaniy i sooruzheniy ugol'nykh
shakht. Moskva, Nedra, 1964. 207 p. (MIRA 18:7)

GOFMAN, Yu.M., inzh.; ANDREYEV, V.Ye., inzh.

High-quality welding of seams in pulsating compression lines.
Energetik 13 no.1:19-20 Ja '65. (MIRA 18:3)

ANDREYEV, V.Ye., inzh.; MITROFANOV, B.M., inzh.; RYKOV, N.M., inzh.; STOLOV,
M.A., inzh.; KHZMALYAN, D.M., kand. tekhn. nauk

Joint burning of milled peat and natural gas 'n thin jets in boilers
with hammer mills. Elek. sta. 35 no.9:17-22 S '64.

(MIRA 18:1)

ANDREYEV, V.Ye., kand. tekhn. nauk; BROMSHTEYN, B.Ye., kand. geol.-
mineral. nauk

Construction of an artificial foundation bed for a tower-type
headframe. Shakht. stroi. 9 no. 12:21-22 D '65. (MIRA 18:12)

1. Donetskii PromstroyNIIproyekt.

ANDREYEV, V.Ye.; SHISHOV, Ye.L., retsenzent; VOSHCHENCHUK, A.F.,
retsenzent; FEDOROV, A.M., otv. red.

[Sinking vertical piles with simultaneous erection of
tower pile drivers] Prokhodka vertikal'nykh stvolov s
odnovenennym sooruzheniem bashennykh koprov. Moskva,
Nedra, 1964. 60 p. (MIRA 17:12)

ANDREYEV, V.Ye., inzh.

Use of headframes abroad. Gor. zhur. no.7:72-74 J1 '63.

(MIRA 16:8)

1. Donetskij nauchno-issledovatel'skiy institut nadshakhtnogo
stroitel'stva Akademii stroitel'stva i arkhitektury UkrSSR.

PETRENKO, B.G., prof.; ANDREYEV, Ye.V., kand.veterin.nauk; ROTOV, V.I.,
kand.veterin.nauk; TOLSTYAK, I.Ye., kand.veterin.nauk;
KONOZENKO, P.A., mladshiy nauchnyy sotrudnik; OMELAYENKO, A.A.,
mladshiy nauchnyy sotrudnik; BAKUMENKO, M.D., mladshiy nauchnyy
sotrudnik; CHECHETKINA, N.P., starshiy laborant

Crystal violet blood vaccine against foot-and-mouth disease.
Veterinariia 40 no.7:9-10 J1 '63. (MIRA 16:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy
veterinariii.

(Ukraine--Foot-and-mouth disease--Preventive inoculation)

ANDREYEV, Ye.

Working space of a designer. NTO 2 no.9:42-43 S '60.

(MIRA 13:9)

1. Nachal'nik konstruktorskogo byuro Nauchno-issledovatel'skogo instituta tekhnologii i organizatsii proizvodstva.
(Design, Industrial--Equipment and supplies)

ANDREYEV, Ye.; ZAKHAROV, V., inzh.

Follow-up on an invention. Nauka i zhizn' 29 no.9:98-99 S '62.
(MIRA 15:10)

1. Nachal'nik otdela Nauchno-issledovatel'skogo institut tekhnologii i organizatsii proizvodstva (for Andreyev). 2. Tsentral'noye byuro tekhnicheskoy informatsii Mosgorsovnarkhoza.

(Desks)

ANDREYEV, Ye., inzh.

Electric screw driver. Okhr. truda i sots. strakh. 3 no.9:65
S '60. (MIRA 14:4)

(Power tools)

ANDREYEV, Ye.

Pay more attention to dissemination of scientific information.
Vest. AN Kazakh. SSR 11 no. 8:39-45 Ag '54. (MIRA 8:2)
(Science)

1ST AND 2ND ORDERS										PROCESSES AND PROPERTIES INDEX									
ANDREYEV, Ye.																			
Molybdenite on the Kudara River (Pamir). E. Andreyev. <i>Tadzhikische Komplexe Expedition 1932</i>, 144d. <i>Wiss. Leningrad 1933</i>, 168-74; <i>Neues Jahrb. Mineral. Geol., Referate 11</i>, 1935, 146. Molybdenite occurs in nests along the contact and in small amts. in a lens of soapstone at the contact of cryst. schist and granite. The mean Mo content of the ore is 0.1 to 0.15%. I. E. Schanter																			
ASB-35A METALLURGICAL LITERATURE CLASSIFICATION										1ST AND 2ND ORDERS									
1ST AND 2ND ORDERS										1ST AND 2ND ORDERS									

ANDREYEV, Ye.; ZAKHAROV, V., inzh.

Sectional equipment for a working place. Nauka i zhizn' 29
no.1:110-111 Ja '62. (MIRA 15:3)

1. Nachal'nik konstruktorskogo byuro Nauchno-issledovatel'skogo
instituta tekhnologii i organizatsii proizvodstva (for Andreyev).
(Factories--Equipment and supplies)